



**US Army Corps  
of Engineers** ®  
Walla Walla District

# Dworshak Dam

**Powerhouse Capacity:** 400 megawatts

**Location:** North Fork of the Clearwater River, River Mile 1.9,  
near Orofino, Idaho

**In-Service Date:** June 1972

**Normal Operating Pool:** 1,445-1,600 feet MSL

**Spillway:** 498 feet high, 2 gates

**Reservoir Capacity:** 3,468,000 acre-feet

**Authorization:** The project was authorized by the Flood Control Act of 1962.

**Progress:** Construction of the dam began in 1966, and the project became operational for flood damage reduction in June 1972. Power came online in March 1973. Three power generating units are in service. The development of recreational facilities along the reservoir are complete, and all facilities are operational. A multi-level power intake structure on the upstream face of the dam which duplicates natural river water temperatures downstream to assure the continuance of existing fish runs, is operational. Log-handling facilities were completed in May 1979. The facilities were used by the timber industry through the mid-1980s when development of back-country roads provided more cost-effective transportation routes. Mitigation land acquisition and the development of a wildlife browse area is complete.



**Project:** The project includes Dworshak Dam, Dworshak Reservoir lands, powerhouse, recreation facilities,

wildlife mitigation and Dworshak National Fish Hatchery. Since 1972, \$2.8 million in potential flood damages have been prevented by the project.

**Dworkshak Dam:** The project has a straight concrete gravity dam with a structural height of 717 feet and a crest length of 3,287 feet at elevation 1,613 MSL. The dam is located on the North Fork Clearwater River at River Mile 1.9. The dam is the highest straight-axis concrete dam in the Western Hemisphere. Only two other dams in the United States exceed it in height.

**Reservoir:** Dworshak Reservoir has a gross storage capacity of 3,468,000 acre-feet, of which about 2 million acre-feet is used for local and regional flood control; and for at-site and downstream power generation. At elevation 1,600 MSL, the reservoir is about 54 miles long, has a surface area of about 20,000 acres and extends into the Bitterroot Mountains. The reservoir provides substantial recreational and wildlife benefits.

**Generators:** The powerhouse has two 90,000-kilowatt units and one 220,000-kilowatt unit – 400 megawatt total powerhouse capacity. During fiscal year 2005, 1.74 billion kilowatt hours of electricity were produced.





**Lands:** The project contains about 50,800 acres. At normal full pool, the surface area of Dworshak Reservoir is about 20,000 acres. There are about 30,000 acres of project lands surrounding the reservoir used for public recreation purposes, wildlife habitat, wildlife mitigation and log-handling facilities. These include federally owned lands managed by the Corps, as well as easement lands managed by the U.S. Forest Service to which the Corps has flowage easement rights. Recreation opportunities include boating, water-skiing, fishing, developed and primitive camping, picnicking, hiking and hunting. Boat launching is available at six locations. Visitation to during fiscal year 2005 was 134,497.

**Fisheries Mitigation:** The construction of Dworshak Dam resulted in blocking anadromous steelhead trout, and converting a river habitat to a reservoir. Mitigation for fish losses has resulted in the completion of the Dworshak National Fish Hatchery, constructed and maintained by the Corps and operated by the U.S. Fish and Wildlife Service. The Dworshak hatchery is the largest steelhead hatchery in the world. After Dworshak Reservoir was filled, kokanee salmon and smallmouth bass were stocked and became self-sustaining in the reservoir. The abundance of kokanee salmon in the reservoir has made it the favored sport species in the reservoir.

**Wildlife Mitigation:** The filling of the reservoir resulted in the loss of about 15,000 acres of terrestrial habitat. The greatest loss of wildlife habitat was the winter range for Rocky Mountain elk and white-tailed deer. To offset this loss, mitigation lands have been developed, and are managed for winter range. About 7,000 acres were purchased are managed specifically for elk mitigation.

**People:** About 45 Walla Walla District employees work at the Dworshak Project. They serve as electricians, mechanics, welders, a forester, utilitymen, heavy equipment operators, park rangers, biologists, environmental resource specialists, administrative staff, engineers and maintenance workers. Together, they ensure the safe and continuous operation of the project.

**Budget:** During fiscal year 2005, total expenditures were about \$8.6 million for the Dworshak Project.

**References:** Annual Report of the Chief of Engineers on Civil Works Activities, Fiscal Year 2005, Department of the Army Corps of Engineers, Extract Report of the Walla Walla District.



**For more information contact:**

Public Affairs Office, Walla Walla District  
U.S. Army Corps of Engineers  
201 N. 3<sup>rd</sup> Avenue, Walla Walla, WA 99362  
(509) 527-7020  
cenww-pa@usace.army.mil  
[www.nwww.usace.army.mil](http://www.nwww.usace.army.mil)